## CLAIMS

- An immunochemical assay for anti-HM1.24 antibody, said method comprising the steps of reacting soluble HM1.24 antigen protein and anti-HM1.24 antibody contained in a test sample, and then detecting or determining the anti-HM1.24 antibody bound to the soluble HM1.24 antigen protein.
- The immunochemical assay according to claim 1 wherein said soluble HM1.24 antigen protein is bound to a support.
- An immunochemical assay for soluble HM1.24 3. antigen protein, said\method comprising the steps of reacting anti-HM1.24 antibody and soluble HM1.24 antigen protein contained in a test sample, and then detecting or determining the soluble HM1.24 antigen protein bound to the anti-HM1.24 antibody.
- The immunochemical assay according to claim 3 wherein said anti-HM1.24 antibody is bound to a support
- The immunochemical assay according to any of any claims 1 to 4 wherein said soluble HM1.24 antigen protein is fused to another peptide or polypeptide.
- The immunochemical as ay according to claim 2 6. 🔀 wherein said support is beads or a plate.
- The immunochemical assay according to any of To\_6 wherein the anti-HM1\.24 antibody bound to the soluble HMI.24 antigen protein or the soluble HM1.24 antigen protein bound to the anti-HM1.24 antibody is detected or determined using a primary antibody against the anti-HM1.24 antibody or a primary antibody against the soluble HM1.24 antigen protein.
- The immunochemical assay according to approf to 7 wherein the anti-HM1.24 antibody bound to the soluble HM1.24 antigen protein or the soluble HM1.24 antigen protein bound to the anti-HM1.24 antibody is detected or determined using a primary antibody against the anti-HM1.24 antibody or a primary antibody against the soluble HM1.24 antigen protein, and a second\antibody

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against said primary antibody.

The immunochemical assay according to any of claims to 8 wherein the primary antibody or the second antibody is Tabeled with a radioisotope, an enzyme, biotin/avidin or a fluorogenic substance.

- 10. The soluble HM1.24 antigen protein having the amino acid sequence as set forth in SEQ ID NO: 1.
- 11. A fusion protein of the soluble HM1.24 antigen protein according to claim 10 and another peptide or polypeptide.
- 12. DNA encoding the soluble HM1.24 antigen protein or the fusion protein of the soluble HM1.24 antigen protein and another peptide or polypeptide according to claim 10 and 10.

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